TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371

ATTORNEY'S DOCKET NUMBER: 0119/0004

IC10 Rec'd PCT/PTO 22 JAN 2002

U.S. APPLICATION NO. (If known, see 37 CFR 1.5): 10/031609

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/GB00/03045	7 August 2000 (07.08.2000)	26 August 1999 (26.08.1999)

TITLE OF INVENTION

LARYNGEAL MASK

APPLICANT(S) FOR DO/EO/US

MICHAEL ANTHONY COLLINS

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. § 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
   a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
   b. ☐ has been transmitted by the International Bureau.
   c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
   a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
   b. ☐ have been transmitted by the International Bureau.
   c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
   d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the Annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern other document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A FIRST preliminary amendment.
    ☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter
16. ☒ Other items or information:

    Notification of Transmittal of the International Preliminary Examination Report - Form PCT/IPEA/416
    International Preliminary Examination Report - Form PCT/IPEA/409

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)	INTERNATIONAL APPLICATION NO.	ATTORNEY'S DOCKET NUMBER
10/031609	PCT/GB00/03045	0119/0004

☒ The following fees are submitted:

	CALCULATIONS	PTO USE ONLY
Basic National Fee (37 CFR 1.492(a)(1)-(5)): JC18 Rec'd PCT/PTO 22 JAN 2002		
Search Report has been prepared by the EPO or JPO **$890.00**		
International preliminary examination fee paid to USPTO (37 CFR 1.482) **$490.00**		
No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) . . . **$750.00**		
Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO **$1,040.00**	$1,040.00	
International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) **$100.00**		
ENTER APPROPRIATE BASIC FEE AMOUNT =	$1,040.00	
Surcharge of **$130.00** for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).	$	

Claims	Number Filed	Number Extra	Rate		
Total Claims	11-20 =		X **$18.00**	**$0.00**	
Independent Claims	3- 3 =		X **$84.00**	**$0.00**	
Multiple dependent claim(s)(if applicable)			+ **$280.00**	$	
			TOTAL OF ABOVE CALCULATIONS =	**$1,040.00**	
Reduction by 1/2 for filing by small entity, if applicable. Verified Small Entity statement must also be filed. (Note 37 CFR 1.9, 1.27, 1.28)				$	
			SUBTOTAL =	$	
Processing fee of **$130.00** for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				$	
			TOTAL NATIONAL FEE =	$1,040.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). **$40.00** per property +				$ 40.00	
			TOTAL FEES ENCLOSED =	$1,080.00	
			Amount to be: refunded	$	
			charged	$	

a. ☒ A check in the amount of $1,080.00 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. **50-0501** in the amount of $_____ to cover the above fees. A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. **50-0501** A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b) must be filed and granted to restore the application to pending status

SEND ALL CORRESPONDENCE TO:

LAW OFFICE OF LOUIS WOO
1901 North Fort Myer Drive
Suite 501
Arlington, Virginia 22209

SIGNATURE

Louis Woo
NAME

31,730
REGISTRATION NUMBER

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	
Michael Norman COLLINS	
Serial No.	Art Unit:
Filed: concurrently herewith	Examiner:
For: LARYNGEAL MASK AIRWAY	Atty Docket: 0119/0004

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified application before examination.

In the Claims

Please amend claims 1-10 as follows:

1. (Amended) A laryngeal mask airway including a tubular portion and a mask portion at its patient end having a sealing cuff of generally oval shape defining an opening within its center and adapted to seal with patient tissue around the laryngeal inlet, the mask portion defining a recess extending from the opening to the patient end of the tubular portion, characterized in that the patient end of the tubular portion is located above and to the rear of the rear side of the opening such as to space it away from the epiglottis.

2. (Amended) An airway according to Claim 1, characterized in that the patient end of the tubular portion is located substantially midway across the width of the rear side of the sealing cuff.

3. (Amended) An airway according to Claim 1, characterized in that the tubular portion is a separate tube bonded into a collar on the mask portion.

4. (Amended) An airway according to Claim 1, characterized in that the longitudinal center line along the internal surface of the roof of the recess is substantially straight.

5. (Amended) An airway according to Claim 1, characterized in that the height of the recess is between 2.5 and 3.5 the internal diameter of the tubular portion.

6. (Amended) An airway according to Claim 1, characterized in that the ratio of the internal diameter of the tubular portion cubed to the volume of the recess is between 50 and 68.

7. (Amended) A laryngeal mask airway including a tubular portion and a mask portion at its patient end having a sealing cuff of generally oval shape defining an opening within its center and adapted to seal with patient tissue around the laryngeal inlet, the mask portion defining a recess extending from the opening to the patient end of the tubular portion, characterized in that the height of the recess is between 2.5 and 3.5 the internal diameter of the tubular portion

8. (Amended) An airway according to Claim 7, characterized in that the height of the recess is between 2.96 and 3.27 the internal diameter of the tubular portion.

9. (Amended) A laryngeal mask airway including a tubular portion and a mask portion at its patient end having a sealing cuff of generally oval shape defining an opening within its center and adapted to seal with patient tissue around the laryngeal inlet, the mask portion defining a recess extending from the opening to the patient end of the tubular portion, characterized in that the ratio of the internal diameter of the tubular portion cubed to the volume of the recess is between 50 and 68.

10. (Amended) An airway according to Claim 9, characterized in that the ratio of the internal diameter of the tubular portion cubed to the internal volume of the recess is between 50 and 60.

Please add new claim 11 as follows:

11. (Newly Added) An airway according to Claim 2, characterized in that the tubular portion is a separate tube bonded into a collar on the mask portion.

Respectfully submitted,

Louis Woo, Reg. No. 31,730
Law Offices of Louis Woo
1901 N. Fort Myer Drive, Suite 501
Arlington, Virginia 22209
Phone: (703) 522-8872

Date: Jan 22 2002

VERSION TO SHOW MARKINGS TO SHOW CHANGES MADE

Attachment Claims Pursuant to 37 C.F.R. 1.121(c)(1)(ii)

Please amend claims 1-10 as follows:

1. (Amended) A laryngeal mask airway including a tubular portion [(1)] and a mask portion [(5)] at its patient end [(3)] having a sealing cuff [(60)] of generally oval shape defining an opening [(61)] within its [centre] center and adapted to seal with patient tissue around the laryngeal inlet, the mask portion [(5)] defining a recess [(54)] extending from the opening [(61)] to the patient end [(3)] of the tubular portion [(1)], [characterised] characterized in that the patient end [(3)] of the tubular portion [(1)] is located above and to the rear of the rear side [(62)] of the opening [(61)] such as to space it away from the epiglottis.

2. (Amended) An airway according to Claim 1, [characterised] characterized in that the patient end [(3)] of the tubular portion [(1)] is located substantially midway across the width of the rear side [(62)] of the sealing cuff [(60)].

3. (Amended) An airway according to Claim 1, characterized [or 2, characterised] in that the tubular portion is a separate tube [(1)] bonded into a collar [(51)] on the mask portion [(5)].

4. (Amended) An airway according to Claim 1, characterized [any one of the preceding claims, characterised] in that the longitudinal [centre] center line along the internal surface of the roof [(40)] of the recess [(54)] is substantially straight.

5. (Amended) An airway according to Claim 1, characterized [any one of the preceding claims, characterised] in that the height [(H)] of the recess [(54)] is between 2.5 and 3.5 the internal diameter of the tubular portion [(1)].

6. (Amended) An airway according to Claim 1, characterized [any one of the preceding claims, characterised] in that the ratio of the internal diameter of the tubular portion [(1)] cubed to the volume of the recess [(54)] is between 50 and 68.

7. (Amended) A laryngeal mask airway including a tubular portion [(I)] and a mask portion [(5)] at its patient end [(3)] having a sealing cuff [(60)] of generally oval shape defining an opening [(61)] within its [centre] center and adapted to seal with patient tissue around the laryngeal inlet, the mask portion [(5)] defining a recess [(54)] extending from the opening [(61)] to the patient end [(3)] of the tubular portion [(1)], [characterised] characterized in that the height [(H)] of the recess [(54)] is between 2.5 and 3.5 the internal diameter of the tubular portion [(1)].

8. (Amended) An airway according to Claim 7, [characterised] characterized in that the height [(H)] of the recess [(54)] is between 2.96 and 3.27 the internal diameter of the tubular portion [(1)].

9. (Amended) A laryngeal mask airway including a tubular portion [(1)] and a mask portion [(5)] at its patient end [(3)] having a sealing cuff [(60)] of generally oval shape defining an opening [(61)] within its [centre] center and adapted to seal with patient tissue around the laryngeal inlet, the mask portion [(5)] defining a recess [(54)] extending from the opening [(61)] to the patient end [(3)] of the tubular portion [(1)], [characterised] characterized in that the ratio of the internal diameter of the tubular portion [(1)] cubed to the volume of the recess [(54)] is between 50 and 68.

10. (Amended) An airway according to Claim 9, [characterised] characterized in that the ratio of the internal diameter of the tubular portion [(1)] cubed to the internal volume of the recess is between 50 and 60.

Please add new claim 11 as follows:

11. (Newly Added) An airway according to Claim 2, characterized in that the tubular portion is a separate tube bonded into a collar on the mask portion.

LARYNGEAL MASK AIRWAY

This invention relates to apparatus in the form of a laryngeal mask airway including a tubular portion and a mask portion at its patient end having a sealing cuff of generally oval shape defining an opening within its centre and adapted to seal with patient tissue around the larnygeal inlet, the mask portion defining a recess extending from the opening to the patient end of the tubular portion.

Laryngeal mask airways are used to ventilate and to supply anaesthetic gas to a patient during surgery. Laryngeal mask airways differ from endotracheal tubes, which extend into the trachea and terminate beyond the vocal folds. By contrast, laryngeal mask airways have a tubular shaft opening into the centre of a generally elliptical mask or cuff, which is inflated to seal in the region of the hypopharnyx, at the top of the trachea. The cuff is inflated with air supplied along a small-bore inflation line communicating with the interior of the cuff. Laryngeal masks are described in, for example: US 5355879, US 5305743, US 5297547, US 5282464, GB 2267034, US 5249571, US 5241956, US 5303697, GB 2317830, GB 2249959, GB 2111394, EP 448878, US 4995388, GB 2205499, GB 2128561, GB 2298797, GB 2321854, GB 2334215, GB 2323289, GB 2323290, GB 2318735 and GB 2330312.

One problem with laryngeal masks is that there is a risk that the air passage along the mask may be blocked by the epiglottis during insertion. Attempts have been made to reduce this risk by means of bars extending across the opening to the mask but this has the disadvantage of making it more difficult to insert instruments along the airway.

It is an object of the present invention to provide alternative medico-surgical apparatus.

According to one aspect of the present invention there is provided apparatus of the above-specified kind, characterised in that the patient end of the tubular portion is located above and to the rear of the rear side of the opening such as to space it away from the epiglottis.

The patient end of the tubular portion is preferably located substantially midway across the width of the rear side of the sealing cuff. The tubular portion may be a separate tube bonded into a collar on the mask portion. The longitudinal centre line along the internal surface of the roof of the recess is preferably substantially straight. The height of the recess may be between 2.5 and 3.5 the internal diameter of the tubular portion. The ratio of the internal diameter of the tubular portion cubed to the volume of the recess is preferably between 50 and 68.

According to another aspect of the present invention there is provided a laryngeal mask airway including a tubular portion and a mask portion at its patient end having a sealing cuff of generally oval shape defining an opening within its centre and adapted to seal with patient tissue around the larnygeal inlet; the mask portion defining a recess extending from the opening to the patient end of the tubular portion, characterised in that the height of the recess is between 2.5 and 3.5 the internal diameter of the tubular portion.

The height of the recess is preferably between 2.96 and 3.27 the internal diameter of the tubular portion.

According to a further aspect of the present invention there is provided a laryngeal mask airway including a tubular portion and a mask portion at its patient end having a sealing cuff of generally oval shape defining an opening within its centre and adapted to seal with patient tissue around the larnygeal inlet, the mask portion defining a recess extending from the opening to the patient end of the tubular portion, characterised in that the ratio of the internal diameter of the tubular portion cubed to the volume of the recess is between 50 and 68.

Preferably, the ratio of the internal diameter of the tubular portion cubed to the internal volume of the recess is between 50 and 60.

A medico-surgical tube in the form of a laryngeal mask airway according to the present invention, will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of the airway;

Figure 2 is a sectional side elevation view of the airway;

Figure 3 is a transverse section across the airway along the line III-III of Figure 2 to an enlarged scale;

Figure 4 is a view of the airway from below; and

Figure 5 is a sectional side elevation view of an alternative airway.

With reference to Figures 1 to 4, the airway includes a curved tube or shaft 1 of a bendable plastics material having a channel 2 in the form of a groove extending along its length on its outside surface and on the inside of its curve. The shaft 1 is preferably made by extrusion and may be reinforced by means of an embedded helical element, such as of metal or plastics. At its patient end 3, the shaft 1 is attached to a mask portion 5.

The mask portion 5 comprises a mount member 50 of a relatively stiff but compliant plastics material and an inflatable cuff 60 attached to the mount member. The mount member 50 is hollow and of generally shoe shape, having a tubular extension or collar 51 at its upper or posterior side located at the rear, left-hand or machine end of the mount. The patient end 3 of the shaft 1 is bonded into one end of the collar 51. The other end of the collar 51 opens into a central recess or atrium 54 within the mount 50. The internal, anterior surface of the roof 40 of the atrium 54 is arched transversely but is substantially straight, or is slightly concave, along its longitudinal centre line. The roof 40 is uninterrupted by any surface projections or formations that would impede free movement of the epiglottis over the roof. Viewed in plan, the mount 50 is oval with its lower or anterior side 53 lying on a flat plane extending at an angle of about 30° to the axis of the patient end 3 of the collar 51. A channel

55 in the form of a groove extends along the inside of the mount member 50 in line with the groove 2 along the shaft 1 and this opens through a hole 56 into the cuff 60.

The cuff 60 may be of any conventional form, such as described in GB 2323291 or GB 2321854. The cuff 60 is only shown schematically in the drawings but is of annular, elliptical shape, being attached to the forward end surface 53 of the mount member 50 and having a central opening 61 into the atrium 54. The cuff 60 is of a thin, flexible plastics material so that it can be deflated to a low profile for insertion and can be inflated to seal with surrounding tissue when correctly positioned.

The roof 40 of the mount 50 is relatively high compared with previous laryngeal mask airways, especially its central region A and its rear region B adjacent the tubular portion or collar 51. The height H of the atrium ranges from about 2.5 to 3.5 times the internal diameter ID of the shaft 1, or its equivalent where the shaft does not have a circular section - preferably the ratio H/ID is between 2.96 and 3.27. In this way, the atrium 54 has a relatively large volume compared with previous airways. In particular, the ratio of ID^3/Volume is in the range 50 to 68 where Volume is the volume of the atrium 54 defined by a plane of the lower, sealing surface of the cuff 61 when inflated, and a vertical, transverse surface through the highest point of the rear region B. For a typical tube having an internal diameter of 8.5mm, the ratio H/ID might be 3.06 and the ratio of ID^3/Volume might be 61.82.

The smallest part of the atrium 54, where the patient end of the collar 51 opens into the atrium, is the part most likely to be blocked by the epiglottis during insertion. The collar 51 positions the patient end 3 of the shaft 1 to the rear of the rear part 62 of the opening 61 and, more particularly, positions it directly above the rear part 63 of the cuff 60 so that it is located as far away as possible from the epiglottis, thereby minimizing the risk of blockage. The large volume of the atrium 54 also ensures that the epiglottis can move freely within the mask, should it enter, so that there is less risk of it catching on the interior of the mask. The present construction avoids the need for any obstruction across the opening of the mask in order to prevent blockage by the epiglottis.

In general, the patient end of the tubular portion 1 is located to the rear of the rear side 62 of the opening 61, that is, on the side towards the machine end of the airway, and is preferably located approximately midway across the width of the sealing cuff. Instead of the tube and mount being separate components, they could be provided by one integral moulded component, with the location where the tubular portion increases in internal diameter being regarded as the patient end of the tubular portion.

The airway also includes an inflation line 70 in the form of a small-diameter flexible plastics tube extending along the groove 2 in the shaft 1, with the patient end of the tube extending along the groove 55 in the mount member 50 and projecting through the hole 56 into the cuff 60. The cuff 60 is sealed with the outside of the inflation line 70 so that it opens into the interior of the cuff. The rear, machine end of the inflation line 70 is attached to a combined inflation indicator balloon and connector 71 of conventional kind. The groove 2 in section forms the major part of a circle, being open on the surface of the shaft through a slit so that the inflation line 70 is retained in the groove mechanically, although it is preferably also bonded into the groove close to the patient end of the shaft 1, such as by means of a solvent or adhesive. A number of lateral notches 20 are spaced from one another along the machine end of the groove 2. The size of the notches 20 is such as to allow the inflation line 70 to extend out of the groove 2 through a notch. The airway is supplied with the inflation line 70 extending out of the groove 2 through the notch 20 closest to the machine end of the shaft 1. If the user wishes to cut the shaft 1 shorter, at a location forwardly of where the inflation line 70 extends from the shaft, he simply pulls the inflation line away from the shaft so that it peels out of the groove 2 to the next notch 20, or to any other notch, thereby reducing the length of the inflation line attached with the shaft. In this way, the inflation line 70 is kept neatly with the shaft along most of the length of the shaft 1 but the shaft can be cut to any desired length. There are other ways in which the inflation line could be attached with the shaft, such as by means of a rupturable adhesive or other bond. It will be appreciated that this form of peelable attachment of a small-bore line could have applications in other tubes having a minor lumen and where it is desirable to be able to alter the length of the small-bore line attached with the main shaft, such as endotracheal tubes.

Securing the inflation line 70 to the shaft 1 along most of its length avoids any loose tube within the patient's mouth and ensures that the inflation indicator and connector 71 are readily accessible outside the mouth. Reliable assembly of the airway is facilitated by this arrangement compared with alternative arrangements employing an extruded small-bore lumen within the wall of the shaft since, in such arrangements, connection needs to be made to both ends of the bore. The present invention can also be used with shafts that are reinforced.

It is not essential that the channel in the mount member extend along its inner surface; it could extend along an outer surface, as shown in Figure 5, where similar features to those in Figures 1 to 4 are given the same numbers with the addition of a prime '. In this arrangement, the groove 55' extends along the outside of the mount member 50' so that the inflation line 70' can run along the groove and open into the cuff 60'.

CLAIMS

1. A laryngeal mask airway including a tubular portion (1) and a mask portion (5) at its patient end (3) having a sealing cuff (60) of generally oval shape defining an opening (61) within its centre and adapted to seal with patient tissue around the larnygeal inlet, the mask portion (5) defining a recess (54) extending from the opening (61) to the patient end (3) of the tubular portion (1), characterised in that the patient end (3) of the tubular portion (1) is located above and to the rear of the rear side (62) of the opening (61) such as to space it away from the epiglottis.

2. An airway according to Claim 1, characterised in that the patient end (3) of the tubular portion (1) is located substantially midway across the width of the rear side (62) of the sealing cuff (60).

3. An airway according to Claim 1 or 2, characterised in that the tubular portion is a separate tube (1) bonded into a collar (51) on the mask portion (5).

4. An airway according to any one of the preceding claims, characterised in that the longitudinal centre line along the internal surface of the roof (40) of the recess (54) is substantially straight.

5. An airway according to any one of the preceding claims, characterised in that the height (H) of the recess (54) is between 2.5 and 3.5 the internal diameter of the tubular portion (1).

6. An airway according to any one of the preceding claims, characterised in that the ratio of the internal diameter of the tubular portion (1) cubed to the volume of the recess (54) is between 50 and 68.

7. A laryngeal mask airway including a tubular portion (1) and a mask portion (5) at its patient end (3) having a sealing cuff (60) of generally oval shape defining an opening (61) within its centre and adapted to seal with patient tissue around the larnygeal inlet,

the mask portion (5) defining a recess (54) extending from the opening (61) to the patient end (3) of the tubular portion (1), characterised in that the height (H) of the recess (54) is between 2.5 and 3.5 the internal diameter of the tubular portion (1).

8. An airway according to Claim 7, characterised in that the height (H) of the recess (54) is between 2.96 and 3.27 the internal diameter of the tubular portion (1).

9. A laryngeal mask airway including a tubular portion (1) and a mask portion (5) at its patient end (3) having a sealing cuff (60) of generally oval shape defining an opening (61) within its centre and adapted to seal with patient tissue around the larnygeal inlet, the mask portion (5) defining a recess (54) extending from the opening (61) to the patient end (3) of the tubular portion (1), characterised in that the ratio of the internal diameter of the tubular portion (1) cubed to the volume of the recess (54) is between 50 and 68.

10. An airway according to Claim 9, characterised in that the ratio of the internal diameter of the tubular portion (1) cubed to the internal volume of the recess is between 50 and 60.

Fig.1.

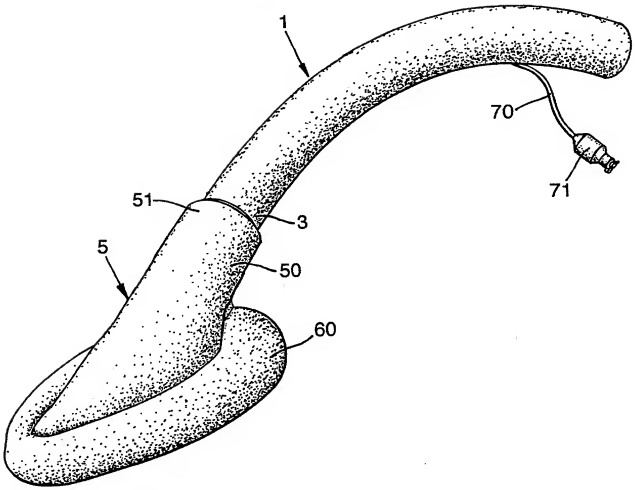

Fig.2.

Fig.4.

Fig.3.

Fig.5.

DECLARATION AND POWER OF ATTORNEY U.S.A.

Attorney Ref. No.

As a below-named inventor, I hereby declare: My residence, post office address and citizenship are as stated below next to my name. I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled Laryngeal Mask Airway, the specification of which

(Check one)

~ is attached hereto.

~ was filed on 7 August 2000 as Application Serial No. PCT/GB00/03045

and was amended on _____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above, and acknowledge a duty to disclose information which is material to the examination of this application under 37 CFR 1.56(a). I hereby claim priority benefits under 35 U.S.C. 119 based on any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate on the present invention, filed before the application(s) on which priority is claimed.

FOREIGN APPLICATION(S), IF ANY, REFERRED TO ABOVE

COUNTRY	APPLICATION NUMBER	DATE	PRIORITY CLAIMED
GB	9920098.2	26 August 1999	YES X NO __
			YES __ NO __
			YES __ NO __

I hereby claim benefit under 35 U.S.C. 120 of any U.S. application(s) listed below. If the subject matter of any claim(s) of this application is not disclosed in the prior U.S. application(s) as required by paragraph one of 35 U.S.C. 112. I acknowledge as duty to disclose material information as defined in 37 C.F.R. 1.56(a) regarding occurrences between the filing date of the prior application(s) and the national or PCT international filing date of this application.

APPLICATION SERIAL NUMBER	DATE	STATUS

3 I hereby appoint Louis Woo, RN 31,730, Conrad Clark, RN 30,340 and Christopher Brody, RN 33,613 as my attorneys with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

Address all communications to **LAW OFFICES OF LOUIS WOO, 1901 North Fort Myer Drive, Suite 501, Arlington, Virginia 22209**

All statements made herein of my own knowledge are true. All statements made on information and belief are believed to be true. These statements were made with knowledge that willful false statements and the like so made are punishable by fine, imprisonment, or both, under 18 U.S.C. 1001 and may jeopardize the validity of the application or any patent issuing thereon.

Note: Please sign one full given name and your surname, using initials where appropriate for other names. It is important that the name be consistent throughout the application papers. Signing of an application more than five weeks prior to filing or an undated application is not acceptable to the Patent and Trademark Office except for receiving an initial filing date.

1-100 Full name of inventor Michael Norman Collins Date: January 14, 2002

Inventor's signature

Residence Hollydene, Canterbury Road, Lyminge, Folkestone, Kent CT18 8HD, England GBX

Citizenship UK

Post Office Address as above

~ Additional inventors listed

Atty Ref. No.